

References

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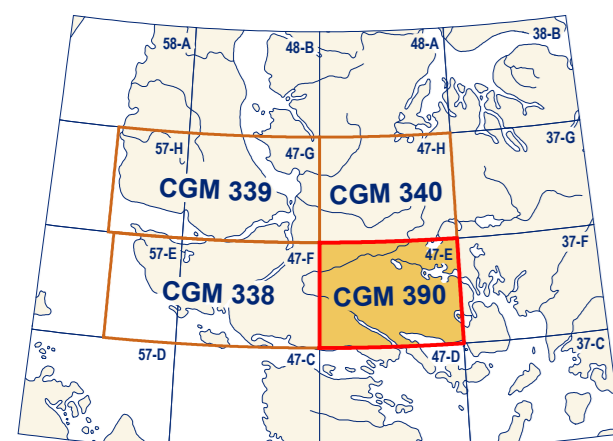
Jackson, G.D. and Sangster, D.F., 1987. Geology and resource potential of a proposed national park, Bylot Island and northwest Baffin Island, Northwest Territories. Geological Survey of Canada, Paper 87-17, 1 .zip file. <https://doi.org/10.4095/122369>

Abstract

This new surficial geology map product represents the conversion of Map 2066A (Dyke, 2004) and its legend, using the Geological Survey of Canada's Surficial Data Model (SDM version 2.3.14) (Deblonde et al., 2018). All geoscience knowledge and information from Map 2066A that conformed to the SDM were maintained during the conversion process. The purpose of converting legacy map data to a common science language and common legend is to enable and facilitate the efficient digital compilation, interpretation, management, and dissemination of geological map information in a structured and consistent manner. This provides an effective knowledge-management tool designed around a geodatabase that can expand, following the type of information to appear on new surficial geology maps.

Résumé

Ce nouveau produit cartographique de la géologie des formations superficielles correspond à la conversion de la Carte 2066A (Dyke, 2004) et de sa légende, en se servant du Modèle de données pour les formations superficielles (MDFS version 2.3.14) de la Commission géologique du Canada (Deblonde et al., 2018). Toutes les connaissances et l'information de nature géoscientifique de la Carte 2066A qui sont en conformité avec le modèle de données ont été conservées pendant le processus de conversion. Le but de la conversion de cartes publiées antérieurement suivant un langage scientifique commun et une légende commune est de permettre et de faciliter la compilation, l'interprétation, la gestion et la diffusion efficaces de l'information géologique cartographique en mode numérique de façon structurée et cohérente. Cette façon de faire offre un outil efficace de gestion des connaissances élaboré à l'aide d'une géodatabase qui pourra évoluer suivant le type d'information à paraître sur les nouvelles cartes de la géologie des formations superficielles.



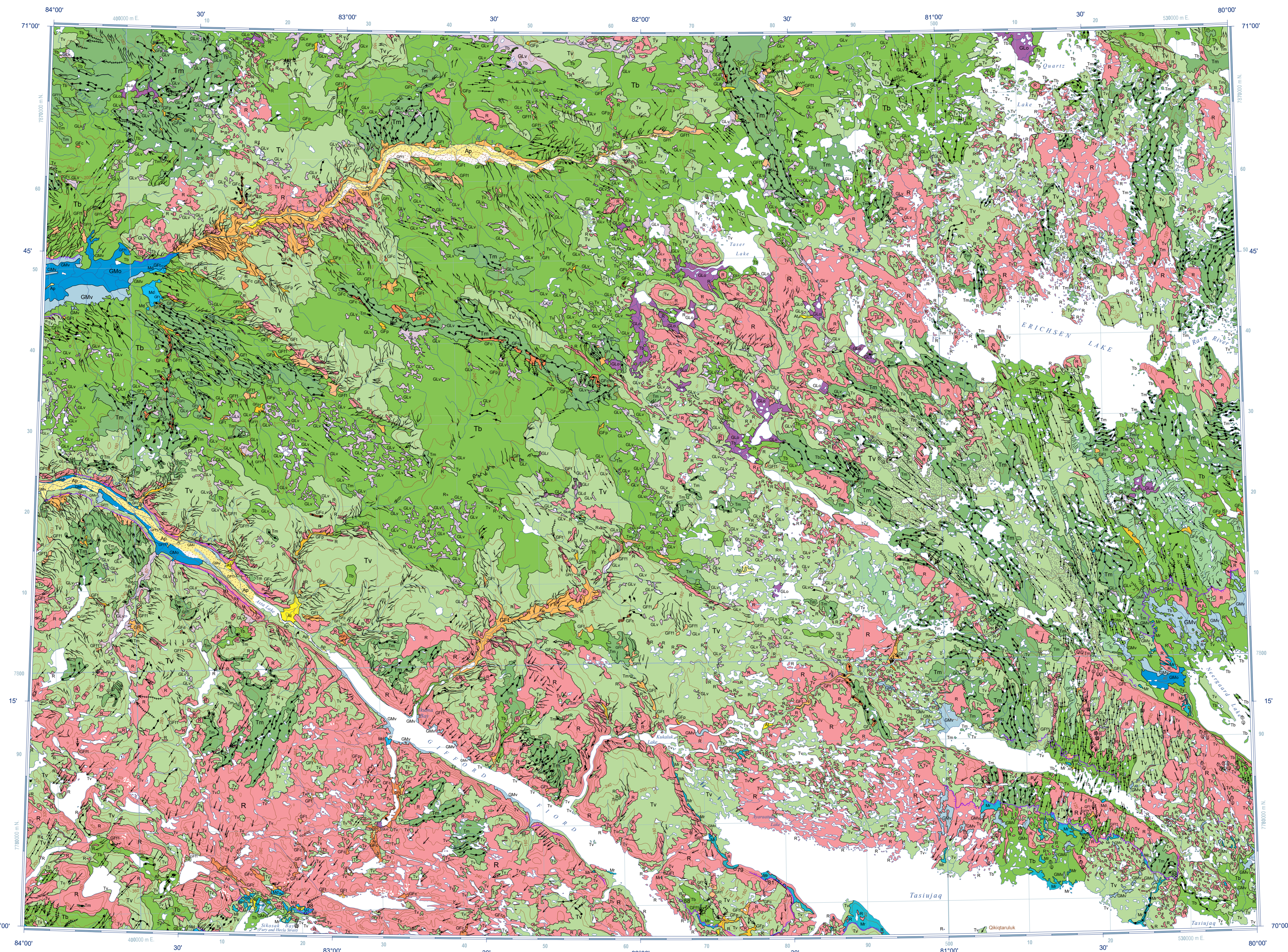
National Topographic System reference and index to adjoining published Geological Survey of Canada maps

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CANADIAN GEOSCIENCE MAP 390
SURFICIAL GEOLOGY
ERICHSEN LAKE
Baffin Island, Nunavut
NTS 47-E
1:250 000



QUATERNARY

HOLOCENE

- Ap** ALLUVIAL SEDIMENTS: alluvium, gravel, and sand; 2 to 20 m thick.
- Af** Floodplain sediments: gravel and sand; 2 to 20 m thick; active braided floodplains; includes active proglacial outwash.
- At** Fan sediments: gravel and sand; 2 to 20 m thick; forming fans.
- Mr** Terraced sediments: gravel and sand; 2 to 20 m thick; forming terraces.
- Md** MARINE SEDIMENTS: gravel, sand, silt, and clay; 1 to 20 m thick; deposited in deltaic and beach environments during regression of the postglacial sea.
- GMo** Beach sediments: gravel and sand; 1 to 5 m thick; forming ridges and swales.
- GMv** Deltaic sediments: clay, silt, sand, and gravel; 5 to 20 m thick; forming coarsening-upward sequences under dissected terraces.
- GLr** OFFSHORE SEDIMENTS: silt, clay silt, and fine sand with dropstones; 2 to 5 m thick; deposited in deep-water proglacial environments.
- GLd** GLACIOMARINE SEDIMENTS: gravel, sand, silt, and clay; 1 to 20 m thick; deposited in deltaic environments during early regression of the postglacial sea.
- GLo** Offshore sediments: silt, clay silt, and fine sand with dropstones; 2 to 5 m thick; deposited in deep-water proglacial environments.
- GLv** GLACIOLACUSTRINE SEDIMENTS: clay, silt, sand, and gravel deposited in glacier-dammed lakes in deep-water, beach, and deltaic environments.
- GLc** Beach sediments: sand and gravel; 1 to 5 m thick; forming beach ridges.
- GLs** Deltaic sediments: clay, silt, sand, and gravel; 5 to 20 m thick; forming coarsening-upward sequences under dissected terraces.
- GLt** Offshore sediments: silt, clay silt, and fine sand with dropstones; 1 to 2 m thick; deposited in deep-water proglacial environments.
- GLf** GLACIOFLUVIAL SEDIMENTS: gravel and sand; 1 to 10 m thick; deposited behind, at, and in front of, the ice margin.
- GFp** Outwash plain sediments: gravel and sand; 1 to 10 m thick; forming proglacial braided floodplains.
- GFt** Terraced sediments: gravel and sand; 1 to 10 m thick; forming proglacial terraces.
- GF1** Outwash fan sediments: gravel and sand; 1 to 10 m thick; forming proglacial fans.
- GFc** Ice-contact sediments: gravel and sand; stratified; 1 to 10 m thick; forming kames.
- GFr** Esker sediments: gravel and sand; stratified; 1 to 10 m thick; forming eskers.

EARLY HOLOCENE AND WISCONSINAN

- Tm** GLACIAL SEDIMENTS (TILL): nonsorted stony muds; 0.5 to 60 m thick; deposited in subglacial and ice-marginal environments; lithic composition generally reflects underlying bedrock.
- Tr** End moraine complex: diamiction; 5 to 60 m thick; composed of, or mantled by, silt; end moraines are extensively kettled in places; large features are mainly cored by debris-rich relict glacier ice.
- Tv** Ridged moraine: diamiction; 2 to 10 m thick; till forming ribbed (Rogen) moraines.
- Tb** Till veneer: diamiction; 0.5 to 2 m thick; discontinuous.
- Td** Till blanket: diamiction; 2 to 10 m thick; forming an undulating blanket with drumlinoids and ribbed moraines in places.

PRE-QUATERNARY

- R** Bedrock, undifferentiated: rock of various compositions and ages (Jackson and Sangster, 1987); variously modified by glacial erosion during the Quaternary and with gneissic till cover; hilly and hummocky surfaces; ice moulded in places; with lake basins in subglacially scoured regions; smooth surfaces exhibit little or no sign of glacial erosion in peninsular interiors (Dyke, 1993); cliffs resulting from glacial overstepping; in places veneered by thin till, commonly bouldery.

Geological contact:

- Defined:** (solid line)
- Inferred:** (dashed line)
- Escarpment:** (line with triangles)
- Limit of submergence:**
 - Marine, defined: (line with circles)
 - Glaciolacustrine, defined: (line with squares)
- Glacial lake spillway, paleodrainage direction known:** (line with arrows)
- Meltwater channel:**
 - Minor, subglacial and proglacial, paleoflow direction known: (line with dots)
 - Lateral, barb on upslope side: (line with triangles)
- Moraine ridge:**
 - Minor, ribbed: (line with circles)
 - Major, lateral: (line with squares)
 - Major, end: (line with triangles)
- Ice-contact scarp:** (line with triangles)
- Esker, paleoflow direction known:** (line with circles)
- Drumlinoid, length not mapped to scale:** (line with circles)
- Crag-and-tail, length not mapped to scale:** (line with circles)
- Ice-moulded bedrock, ice-flow direction known, length mapped to scale:** (line with circles)
- Margin of dispersal train, teeth toward plume axis, steep side of teeth face down ice:** (line with circles)
- Station:**
 - Ice-flow direction unknown: (line with circles)
 - Ice-flow direction known: (line with circles)
 - Crossed striation, 1 = older, 2 = younger: (line with circles)
 - Station location, marine limit elevation (m): (line with circles)

Recommended citation
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Author: Geological Survey of Canada
Geology by A.S. Dyke, 2002; field data by De Beers Canada Inc., 2002
Geology conforms to Surficial Data Model v. 2.3.14 (Deblonde et al., 2018).
Geomatics by S. Eagles and C.D. Stevens

Cartography by N. Côté
Scientific editing by L. Ewert
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Map projection Universal Transverse Mercator, zone 17
North American Datum 1983

SURFICIAL GEOLOGY
ERICHSEN LAKE
Baffin Island, Nunavut
NTS 47-E
1:250 000



Base map at the scale of 1:250 000 from Natural Resources Canada, with modifications.
Elevations in metres above mean sea level.
Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area.
Mean magnetic declination 2023, 25°29'W, decreasing 42.1' annually.
Readings vary from 27°53'W in the NE corner to 22°48'W in the SW corner of the map.

This map is not to be used for navigational purposes.
The Geological Survey of Canada welcomes corrections or additional information from users (gspublications-cgpublications@nrcan-rncan.gc.ca).
Data may include additional observations not portrayed on this map. See map info document accompanying the downloaded data for more information about this publication.
This publication is available for free download through GEOSCAN (<https://geoscan.nrcan.gc.ca/>).

Geological Survey of Canada
Canadian Geoscience Maps



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